

IN THE CLAIMS

Please cancel claims 2-4 without prejudice or disclaimer and amend claim 9 as follows.

1. (Currently Amended) A diagnostic system for diagnosing deterioration of an article comprising:

a light source part for irradiating irradiation light having polarization onto a surface of the article;

a light receiving part for receiving the reflected light from said article;

a measurement part for measuring a variation of polarized light between said ~~irradiated~~ irradiation light and said reflected light; and

a diagnosing part for diagnosing a deterioration degree of said article from said measured variation.

2. - 4. (Canceled)

5. (Currently Amended) A method of diagnosing deterioration of an article, the method comprising the steps of:

irradiating irradiation light having polarity from a light source emitting light having at least one kind of wavelength onto a surface of said article;

receiving the reflected light from said article;

measuring a depolarization degree of polarized light of said reflected light;

determining a first deterioration degree of said article by executing comparison operation using a pre-stored relationship between depolarization degrees of polarized light and deterioration degrees formed using a deteriorated material of the same kind as a material of said article;

irradiating irradiation light having at least two kinds of wavelengths onto the surface of said article;

receiving the reflected light from said article;

measuring an absorbance difference or an absorbance ratio of said reflected light;

determining a second deterioration degree of said article by executing comparison operation using a pre-stored relationship between absorbance difference or absorbance ratio

and deterioration degree formed using a deteriorated material of the same kind as a material of said article; and ~~finally~~

determining a comprehensive deterioration degree of said article from the determined results of the first deterioration degree and the second deterioration degree based on a pre-stored relationship.

6. (Original) A method of managing deterioration of an article using the method of diagnosing deterioration according to claim 5, the method comprising the steps of discriminating a deterioration factor of said article; and outputting improved contents to said factor.

7. (Original) A method of diagnosing deterioration of an article according to claim 5, wherein said article is a cable sheathing insulation material.

8. (Original) A method of diagnosing deterioration of a cable sheathing insulation material according to claim 7, wherein the deterioration diagnosis of a cable sheathing insulation material is performed using a portion in a state that a cable sheath material is peeled.

9. (Currently Amended) A method of managing deterioration of a cable sheathing insulation material, the method comprising the steps of:

irradiating irradiation light having polarization onto a surface of the cable sheathing insulation material;

receiving the reflected light from said cable sheathing insulation material;

measuring a variation of polarized light between said irradiation light and said reflected light;

diagnosing a deterioration degree of said cable sheathing insulation material from said measured variation;

obtaining a relationship between at least one of physical property and/or and electric characteristic of each material used for a the cable sheathing insulation material and a ~~optical diagnosis~~ result obtained from the ~~non-destructive deterioration diagnosis method of cable sheathing insulation material described in claim 1 in advance~~ diagnosing step;

inputting data on the cable sheathing ~~insulator~~ insulation material and manufacturing time of a laid cable having the cable sheathing insulation material to be diagnosed, and laying and environment data such as laying time, a place of the cable laying, a laying period and measuring position information to set a deterioration control

value for determining a changing timing for each material of the cable sheathing insulation material using the data group for diagnosis in advance; and

determining a changing timing of said cable by executing a comparison operation between an optical diagnosis result of the cable sheathing insulation material of said cable to be diagnosed and the preset deterioration control value.